

**Remarks****I. Claim Status:**

Claims 1-7 are pending and stand rejected. Claims 8-12 were canceled previously without prejudice. Claim 1 has been amended to more particularly point out and distinctly claim that which the Applicants regard as their invention. Support for the amendments is found specifically on pages 9 and 10 and more generally throughout the specification and drawings. Claims 3 and 6 have been amended to delete recitation of reference characters and to further conform the claims to U.S. practice. Dependent claims 13-15 have been added and are supported in the specification at pages 10-11. No new matter has been added by the amendments. Entry and consideration of the claims, as amended and as added, are respectfully requested.

**II. Rejections Under 35 U.S.C. § 103(a):**

Claims 1-7 stand rejected as being obvious over Domodossola et al. (U.S. 6,143,225). Claim 1, as amended, is not rendered obvious over Domodossola et al.

Domodossola et al. discloses a device to unload and cool molded parts from an injection molding machine. The device uses a rotatable index turret and a rotatable cooling turret in a variety of connected and separate configurations to perform product molding and mold-product cooling tasks. More specifically, the index turret includes mold halves that when joined are used to create molded items. [2:53-65] The cooling turret includes a plurality of faces with some of the faces including nozzles for administering air to molded items and other faces configured with cooling tubes for receiving molded items for further cooling. The cooling tubes may be either affixed to, or integral with, the turret faces. [3:25-67]

Molded items are moved from the index turret to the cooling turret with an ejection sequence without the assistance of gravity as the transfer is performed in a horizontal orientation. [4:37-44] Embodiments incorporating separated turrets allow for better access for maintenance and more flexibility when processing conditions have to be changed. [7:27-35] Domodossola et al. is silent with respect to modular turret construction.

In complete contrast to the teachings of Domodossola et al., Applicants' invention discloses and claims features that provide for a modular turret construction to dramatically improve efficiency with respect to mold item changes. The plates upon which the holders are attached are configured for placement on the parallelepiped segments in multiple geometric configurations. This allows considerable flexibility and efficiency with respect to mold changes and corresponding cooling holder changes.

The plates are also embedded with duct systems having a plurality of branches to accommodate a plurality of holders. The parallelepiped segment includes a plurality of plate mounting holes to support multiple plate configurations. With any given plate configuration, less than all the mounting holes are utilized. Holes not utilized for a particular arrangement are reversibly plugged or covered depending upon the type of closure used. This construction eliminates the need to modify the turret to accept different plates, or plate configurations.

Domodossola et al. does not show or suggest the inclusion of a plurality of mounting holes to accommodate multiple plate configurations. This should come as no surprise as Domodossola et al. is focused upon the problem, among others, of maintenance efficiency by utilizing two turrets that can be spatially separated to allow greater access to serviceable parts. In contrast, Applicants' claimed invention is

focused upon the problem of providing an efficient means to accommodate multiple mold item changes. Domodossola et al. does not disclose any subject matter relevant to multiple plate configurations.

For these reasons, Domodossola et al. cannot properly be considered to render claim 1 obvious. Accordingly, reconsideration and removal of the rejection of claim 1 under § 103(a) with respect to Domodossola et al. are respectfully requested.

Claims 2-7 depend, directly or ultimately, from claim 1 and are allowable for the same reasons given for the allowability of claim 1. Claim 7 is further allowable as it recites a first bar having a plurality of ducts to allow for multiple plate configurations whereby each holder on a plate will communicate with at least one of the ducts in the first bar so as to allow for the introduction of fluids. As recited in new claim 13, with any plate configuration, the first bar will have a number of ducts that exceeds the number needed to accommodate the holders secured to the plates comprising the specific plate configuration. For these reasons, reconsideration and removal of the rejections of claims 2-7 under § 103(a) are respectfully requested.

New claims 13-15 depend, directly, or ultimately, from claim 1 and are also allowable over Domodossola et al. by virtue of their dependency from an allowable base claim. Claim 13 is further allowable for the reasons given in the previous paragraph. Consideration and allowance of claims 13-15 are also respectfully requested.

Claims 1-6 stand rejected as being obvious over Coran et al. (U.S. Pub. No.: US 2003/0003187). Claim 1, as amended, is not rendered obvious over Coran et al.

Coran et al. discloses a device and method to selectively populate cooling cups with molded items such as preforms in particular patterns on a single plate to improve productivity by extending the cooling portion of the molding process without

compromising the speed and quantity of molded items produced. This is achieved by creating equally spaced preform-receiving receptacles on a single surface. [Para. 48]. By having the receptacles equally spaced, multiple dispersion patterns are possible. [Para. 50]. The system operates by depositing molded items into the cooling cups in precise patterns to allow multiple cycles of cooling to take place on the same plate while the same molding equipment can be cycled repeatedly to continually produce molded items without pausing for the more time intensive cooling process. *Id.* Efficiency is improved by using repeating deposit patterns on the same plate. *Coran et al.* is silent with respect to the utilization of a modular turret configuration.

In contradistinction and as previously stated, Applicants' invention discloses and claims features that provide for a modular turret construction to dramatically improve efficiency with respect to mold item changes. The plates upon which the holders are attached are configured for placement on the parallelepiped segments in multiple geometric configurations. This allows considerable flexibility and efficiency with respect to mold changes and corresponding cooling holder changes.

The plates are also embedded with duct systems having a plurality of branches to accommodate a plurality of holders. The parallelepiped segment includes a plurality of plate mounting holes to support multiple plate configurations. With any given plate configuration, less than all the mounting holes are utilized. Holes that are not utilized for a particular arrangement are reversibly plugged or covered depending upon the type of closure used. This construction eliminates the need to modify the turret to accept different plates, or plate configurations.

*Coran et al.* does not show or suggest the inclusion of a plurality of mounting holes to accommodate multiple plate configurations. Like *Domodossola et al.*, this

should come as no surprise as Coran et al. is focused upon the problem of maximizing cooling time without compromising the speed and volume at which molded products can be produced by a single molding machine. In contrast, Applicants' claimed invention is focused upon the problem of providing an efficient means to accommodate multiple mold item changes. Coran et al. does not disclose any subject matter relevant to multiple plate configurations.

For these reasons, Coran et al. cannot properly be considered to render claim 1 obvious. Reconsideration and removal of the rejection of claim 1 under § 103(a) with respect to Coran et al. are respectfully requested.

Claims 2-6 depend, directly or ultimately, from claim 1 and are allowable for the same reasons given for the allowability of claim 1. Reconsideration and removal of the rejections of claims 2-6 under § 103(a) are respectfully requested.

New claims 13-15 depend, directly, or ultimately, from claim 1 and are also allowable over Coran et al. by virtue of their dependency from an allowable base claim. Consideration and allowance of claims 13-15 are also respectfully requested.

### **III. Conclusion:**

For all the foregoing reasons, the claims are considered to define patentably over the prior art. Reconsideration is requested and favorable action is solicited.

Respectfully submitted,



Mark D. Lorusso  
Reg. No. 41,955  
Lorusso & Associates  
PO Box 21915  
Portsmouth, NH 03802  
Tel: (603) 427-0070  
Fax: (603) 427-5530  
Email: mlorusso@loriplaw.com  
Attorneys for Applicant

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